n

TABLE OF CONTENTS

The following synoptic table shows the first page of each of the principal sections in the respective numbers of the Monthly Weather Review for 1927:

REGULAR MONTHLY CONTRIBUTIONS, 1927

11 more to be provided to the "Chi later" to take the "Chi	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept,	Oct.	Nov.	Dec.
Meteorological summary for southern South America (Navarrete) 1	25	82	133	187 187	239 239	272	328 328	365 365	414	462 462	500 500	833
Bibliography: Recent additions to Weather Bureau Library	95	00	194	188	240	979	200	205	414	400	801	
Recent papers bearing on meteorology	25 27	82 83	134	188	240	273 273	329 330	365 366	414	462	501	533
Solar radiation measurements		84	135	190	242	274	332	368	418	465	503	534
Photoheliographic measurements of sunspots		85	136	191	242	275	332	389	419	466	503	536
Provisional sunspot relative numbers (Wolfer)							JALLE .			467	504	
Aerological observations	31	88	137	192	244	276	333	369	420	467	505	537
Weather in the United States:	1 -							1				1000
General conditions	32	90	139	194	245	277	335	371	422	469	505	539
Cyclones and anticyclones.	32	90	139	194	245	277	335	371	422	469	(3)	(8)
The weather elements	32	90	139	194	245	277	335	371	422	469	506	539
Severe local storms (table)	34	91	141	196	247	279	337	373	424	471	507	541
Storms and warnings	34	93 95 97	142	198	250	281	338	374	425	471	508	542
Rivers and floods	36	95	143	200	251	282	339	375	426	472	509	544
Great Lakes' levels	39	97	145	202	253	283	340	376	426	473	510	546
Effect of weather on crops and farming operations	39	98	145	202	253	284	340	376	427	474	510	546
North Atlantic Ocean.	- 40	00	140	000	254	-00*	341	378	428	ATTE		2.45
Ocean gales (table)	40	98	146	203 204	255	285 286	342	379	429	475 476	511	547
North Pacific Ocean.	41	100	148	205	256	286	343	379	430	477	512	549
Typhoons and depressions (Coronas)	- 41		130	200	200	287	343	380	431	478	513	0.81
Climatological tables:					******	401	010	000	401	310	010	*****
Condensed summary (States)	44	102	149	206	257	288	344	381	432	479	514	556
United States stations	45	103	150	207	258	289	345	382	433	480	515	55
Canadian stations	48	106	153	210	261	292	348	385	436	483	518	554

1 For preceding month in each case.

Discontinued.

The following charts appear in each number of the Review from January to December, inclusive, except as noted after Chart VI:

- CHART I. Tracks of centers of anticyclones.

 II. Tracks of centers of cyclones.

 III. Departure of the mean temperature from the normal.

 IV. Total precipitation for the month.

 V. Percentage of clear sky.

 VI. Isobars at sea level and isotherms at surface; prevailing winds.

 VII. Total snowfall (January to April, and October to December).

 VIII. (etc.). Westher maps of the North Atlantic Ocean (selected days showing principal storm tracks).

 Annual temperature departures for the United States, 1927. (December only.)

 Annual precipitation departures for the United States, 1927. (December only.)

91353-28

CORRECTIONS AND ADDITIONS

1926

MARCH:

Page 125, "Rivers and Floods", the first paragraph, end of fourth line, "106" should be "107".

1926 INDEX (Vol. 54)

Under entry "Woolard, Edgar W." insert: "The application of Chrystal's theory of seiches to Lake Vetter. 297-298."

Above the entry "Serbia" insert: "The application of Chrystal's theory of seiches to Lake Vetter. E. W. Woolard. 297-298."

Below the entry "Vegetation" insert: "Vetter, Lake. The application of Chrystal's theory of seiches. E. W. Woolard. 297-298."

January:
Page 8, first column, about halfway down, the signs in the
equation should be ±.

FEBRUARY:

Page 62, the legend to figure 3 should be "Rainfall periodogram of the Punjab (entire series"; the legend to figure 4 should be "Rainfall periodogram of the British Isles".

APRIL: Page 169, second column, fourth line from bottom, "1925" should be "1926".

Page 207, Florida Peninsula section, the temperature departure for Miami, printed "41.6" should be "+1.6".

Page 315, the title of the article should be "The climatic regions of eastern North America"; same article, third paragraph, fourth line, before "conditions" insert "actual".

Page 319, first column, second paragraph, in the equation the letters "A" and "B" should be set over near the left margin; In the fourth paragraph the equality sign between "E" and "e" should be a minus sign.

SEPTEMBER:

Page 416, top line, first column, "geographical" should be "geophysical".

Page 431, column 2, the paragraph commencing, "In connection with this typhoon," relates to the typhoon of Baler (September 17-20), and, with the rest of the article, should follow the table at the middle of the column, preceding the subtitle, "Three typhoons between the Bonins and Japan."

OCTOBER:

Pages 448 and 449, the legends to the illustrations facing those two pages should be interchanged.

Page 492, second column, the entire column beginning with "The race of this year, etc.", "belongs on the opposite page (493) and forms the opening of the article on that page. NOVEMBER

Page 455 (paper on "Graphical Thermodynamics of the Free Air"), instead of "and (4)" just preceding equation (12), read: "and the nonadiabatic form of Poisson's equation, viz, $T/T_0 = (\theta/\theta_0) \ (p/p_0) \Delta B/\epsilon_p$ ".—E. W. W. Page 492, first column, second paragraph, beginning of last line, "145" should be "135."

MONTHLY WEATHER REVIEW SUPPLEMENT NO. 26

(An Aerological Survey of the United States, Part II)

The values in the following table should be substituted for those under Group 9, summer and annual, in Table 3, page 7:

Altitude (meters)		Sum	ner	Annual				
	D	irection	Velocity	Direction	Velocity			
Surface		24 E.	3. 9	S. 42 E.	4. 6			
250	S.	15 E. 14 E.	5. 1 5. 6	S. 19 E. S. 16 E.	6. 3			
750	S.	12 E.	5. 5	S. 10 E.	7. 3			
1,000		9 E.	5. 3	S. 4 E.	7. 4			
1,500	S.	4 E.	5. 2	8. 21 W.	7. 8			
2,000		6 E.	5. 2	S. 65 W.	8. 4			
3,000		11 E.	5. 5	S. 77 W.	10. 0			
4,000	S.	2 W.	6. 2	S. 83 W.	11. 7			
5,000		56 E.	6. 9	N. 88 W.	13. 6			
6,000			7.8	N. 51 W.	15. 1			
8,000		. 33 E.	9.8	N. 29 W.	19. 1			
10,000	N	. 48 E.	11. 2	N. 32 W.	23. 0			

SUBJECT AND AUTHOR INDEX OF THE MONTHLY WEATHER REVIEW, 1927. VOL. 55

Abbot, Charles Greeley.

Corrected solar-constant values for Montezuma, Chile, May 27-August 24, 1927. 420.

New definitive scale for solar-constant values. 236.

Actinometry. (See Solar radiation measurements.)

Aerological observations. (Monthly report.) See table on page iii of this index.

Aerology:

Aerological soundings by airplane in relation to the Bjerknes theory of cyclones (Jaumotte on). Note. (B. M. Varney.) 132.

Aerological work in Japan. Note. (L. T. Samuels.) 79.
Free-air winds over Honolulu and Guam. (E. A. Beals.) 222.
International aerological soundings at Royal Center, Ind.,
May, 1926. (5 figs.) (W. R. Gregg, S. P. Fergusson &
L. T. Samuels.) 293.
Pilot-balloon ascents on the west coast of Greenland—a
correction. Note. (W. H. Hobbs.) 23.

Aircraft. Lag of thermometers and thermographs for. (H. B. Henrickson and W. G. Brombacher.) (1 fig.) 72.

Airplanes. Jaumotte on aerological soundings by, in relation to the Bjerknes theory of cyclones. Note. (B. M. Varney.) 132.

Alexander, George W. Lightning storms and forest fires in the State of Washington. (4 figs.) 122.

A group or correlation periodogram, with application to the rainfall of the British Isles. (2 figs.) 263.

Investigations of rainfall periodicities between 1½ and 2½ years by use of Schuster's periodogram. (6 figs.) 60.

Note regarding previous use of correlation periodogram by Clayton. 413.

A study of the possibility of economic value in statistical investigations of rainfall periodicities. 110.

Andrus, Clarence G.

An example of widespread bumpiness in the air. 494.

Meteorological aspects of the International Balloon Race from Detroit, Mich., September 10, 1927. (3 figs.) 493.

mometers. New three-cup anemometer. Repr. 533. Anemometers.

Angström, Anders. On the unit of radiation in meteorological treatises on actinometry. 364.

Appalachian Mountains. Weather and forest inflammability in the southern Appalachians. (2 figs.) (E. F. McCarthy.) 119.

Critical spring temperatures for applies in the Yakima Valley, Wash. (8 figs.) (E. S. Ellison and W. L. Close.) 11.
The relation of spring temperatures to apple yields. (2 figs.) (W. A. Mattice.) 456.

Arctic Ocean. The distribution of Arctic ice. Repr. 187. Argentina. July, 1927, weather in. Extracts. 328. Arizona. New irrigation projects in. Excerpts. 327.

Tornadoes in, 1879–1926. (1 fig.) (H. S. Cole.) 176. Tornadoes in, March, 1927. *Note.* (W. C. Hickmon.) 133. Tornadoes in, July 16, 1927. (P. Connor and B. R. Laskowski.) 327.

Atlantic Ocean. The variation of meteorological elements at St. Helena and at some other places in the Atlantic Ocean. Author's abstract. (C. E. P. Brooks.) 187.

Atmosphere: (See also Winds.)

Measurements of solar radiation intensity and determination of the depletion by the atmosphere, with bibliography of pyrheliometric observations. (3 figs.) (H. H. Kimball.) 155.

Measurements of the amount of ozone in the earth's atmosphere and its relations to other geophysical conditions. Part 2. (G. M. B. Dobson, D. N. Harrison, and J. Lawrence.) Repr. 364.

The range of atmospherics. (R. A. W. Watt.) 237.

Austin, Louis W. Preliminary observations on solar activity and radio reception. (2 figs.) 237.

Australia. July, 1927, weather in. Extrs. 328,

Barometers. Recorder of frequency of atmospherics: Its use in meteorology. Repr. (R. Bureau, A. Viant and A. Gret.) 327. Beals, Edward Alden.

Free-air winds over Honolulu and Guam. 222. The northeast trade winds of the Pacific. (12 figs.) 211.

Belden, William S.

A thunderstorm with rain, hail, sleet and snow. Note. 133.

Tornado of May 24, 1927, at St. Joseph, Mo. 228.

Bentley, Wilson A. Some recent treasures of the snow. (18 figs.)

Berlage, H. P., jr. On east-monsoon forecasting for Java. (2 figs.)
(A. J. Henry.) 395.

Berry, E—Willard. Meteorological observations at Negritos,
Peru. (1 fig.) With discussion by A. J. Henry and note by
Robert C. Murphy. 75.

Bibliography. (See also "Bibliography" in table on page iii of
this index). Pyrheliometric observations. (H. H. Kimball.)

163.
Bjerknes theory of cyclones. Aerological soundings by airplane in relation to. Note. (B. M. Varney.) 132.
Bliss, E. W. On British winters in relation to world weather. Note. (A. J. Henry.) 79.
Blue-sky measurements. (1 fig.) (I. F. Hand.) 235.
Brazil. (For meteorological summary of, see "Brazil" in table on page iii of this index.)
British Isles:

A group or correlation periodogram, with application to the rainfall of. (2 figs.) (D. Alter.) 263.

The Royal Meteorological Society's "Atlas of the British Isles." Note. (B. M. Varney.) 80.

Winters, in relation to world weather. Note. (A. J. Henry.)

September weather in. Repr. 413.

Brombacher, W. G. Co-author. (See Henrickson & Brombacher.)

Brooks, Charles E. P.

On the effects of fluctuations of the Gulf Stream on the distribution of pressure. (1 fig.) (A. J. Henry.) 359.

The influence of forests on rainfall and runoff. Repr. 533.

The variation of meteorological elements at St. Helena and at some other places in the Atlantic Ocean. Author's abstract. 187.

Brooks, Charles Franklin. Porference of the Gulf Stream of the distribution of the Gulf Stream of the distribution of the Gulf Stream of the distribution of the Gulf Stream of the Gulf Stream of the distribution of the Gulf Stream of the Gulf Stream of the Gulf Stream of the Gulf Stream of the distribution of the Gulf Stream of

Brooks, Charles Franklin. Performance in long-range weather forecasting. 390.

Brotzman, William S. Damaging gas explosion at Pittsburgh,

Brückner, Edouard. 1862-1927. Obituary. 271.
Brunt, D. Tornadoes started by an oil fire. Note. 24.
Brussells. Weather at, April and May, 1927. 271.
Bureau, R., Viant, A. and Gret, A. Recorder of frequency of atmospherics: Its use in meteorology. Abstr. 327.

California:

March temperature and the following season's precipitation in coastal southern California. (2 figs.) (G. M. French.)

San Jose. Frequencies of weather types at. (2 figs.) (E. S. Nichols.) 403.

Canadian meteorological monthly reports. (See table on page iii

of this index.)
Carvalho, Anselmo Ferraz de. The climate of Coimbra. 237.
Causes of tropical rainfall. Repr. 271.
Chapel, L. T. Winds and storms on the Isthmus of Panama.
(10 figs.) 519.
Charts. Monthly charts of frequency-resultant winds in the United States. (13 figs.) (E. R. Miller.) 308.

Chile:

Corrected solar-constant values for Montezuma, May 27—
August 24, 1927. (C. G. Abbot.) 420.

July weather in. Extracts. 328.

Solar radiation and rainfall in the southern region of. (1 fig.)

(J. B. Navarrete.) Transl. by W. W. Reed. 272.

Clayton, Henry Helm. Use of correlation periodogram. Cited by

D. Alter. 413.
limate. Das Klima als Wettergesamtheit (Climate as totality of Climate. the weather). Translated and summarized by B. S. Nichols. 401.

Climatic regions. Outline of "The climatic regions of eastern North America." (2 figs.) (W. Van Royen.) 410. Climatic zones of North America. (2 figs.) (W. Van Royen.)

Climatology. The climate of Coimbra. (A. F. DeCarvalho.)

237. Close, Wilbur L. Co-author. (See Ellison and Close. Coimbra. The climate of. (A. F. DeCarvalho.) 237.

Snow and cold wave in Europe, December 18-23, 1927. Note. 533.

Snow cover, cold waves, and zero temperatures. (R. M. Dole.) 82.

Dole.) S2.

Cole, Harvey S.

Tornadoes in Arkansas, 1879–1927. (1 fig.) 176.
Tornadoes in Arkansas, May, 1927. Cited on. 226.

Connor, Patrick. Tornadoes in Arkansas, July 16, 1927. 327.

Cook, Albert W. The protection of strawberries from frost through artificial heating. (6 figs.) 354.

Corkhill, Edward C. Tornado at Auburn, Kans., June 3, 1927.

Weather and corn maturity in Iowa. (5 figs.) (C. D. Corn. Reed.) 485. Coronas, José. (See "Typhoons and depressions" in table on

page iii of this index.) Correlation:

Interpretation of correlation coefficients. (C. F. Marvin.)

107.
On the interpretation of correlation coefficients in the analysis of casual relations in physical phenomena. (E. W. Woolard.) 109.

March temperature and the following season's precipitation in coastal southern California. (2 figs.) (G. M. French.)

On the measure of. (G. T. Walker.) 459.
The relation of spring temperatures to apple yields. (2 figs.)
(W. A. Mattice.) 456.
Notes on the theorems of Dines and Walker. (E. W. Wool-

ard.) 460. Weather and corn maturity in Iowa. (5 figs.) (C. D. Reed.)

485. Cycles:

Influence of precipitation cycles on forestry. Abstr. (A. J. Henry.) 461.

The improbability of rainfall cycles. (2 figs.) (C. E. Grun-

sky.) 66.
Introductory note to papers on the reality of meteorological periodicities. (C. F. Marvin.) 66.
Sunspots and rainfall. (3 figs.) (A. Streiff.) 69.

Cyclones and anticyclones:

The greater increase in size and intensity of the extratropical cyclones by night than by day. (W. J. Humphreys.) 496.

The growth of the northeastward-moving cyclones in eastern North America. (W. J. Humphreys.) 495.

A Madagascar cyclone. Note. (W. E. Hurd.) 149.
On the mechanism of. Abstr. (T. Kobayasi.) 327.
Variable features of barometric depressions and anticyclones

as a basis for seasonal forecasting. (N. A. Hessling.)

Day, Preston C. (See "Weather elements" and "Climatological tables" in table on page ii of this index.)
Day, Wilfred P. (See "Cyclones and anticyclones" in table on page iii of this index.)
De Carvalho, A. F. The climate of Coimbra. 237.
Defant, A. Wetter und Wettervorhersage (a review of the second edition by B. M. Varney). 187.
Devereaux, William C. The thunderstorm at Cincinnati and its relation to electrical power service. (8 figs.) 112.
Dines, William Henry. 1855-1927. Obituary. 532.
Dines and Walker. Note on the theorems of. (E. W. Woolard.) 460.

Dobson, G. M. B., Harrison, D. N., and Lawrence, J. Measurements of the amount of ozone in the earth's atmosphere and its relations to other geophysical conditions. Part 2. Repr. 364.

Dole, Robert M. Snow cover, cold waves, and zero temperatures.

Note. 82. Drainage. See Run-off. Dorsey, N. Ernest. Lightning. 268.

Electricity. The thunderstorm at Cincinnati and its relation to

electricity. The tunnerstorm at Chichmat and its relation to electrical power service. (8 figs.) (W. C. Devereaux.) 112. Ellison, Eckley S., and Close, Wilbur L. Critical spring temperatures for apples in the Yakima Valley, Wash. (8 figs.) 11. El Niño Current. (E. W. Berry.) 78. Europe. Snow and cold wave in, December 18-23, 1927. Note.

533. Evaporation. Ten years of evaporation in the Southwest. (C. E.

Linney.) 320.

Exner, Felix M. Interrelations of pressure anomalies over the earth. 238.

Federov, E. S. Das Klima als Wettergesamtheit (Climate as totality of the weather.) Translated and summarized by E. S. Nichols. 401.

Fergusson, Sterling Price.

International aerological soundings at Royal Center, May, 1927: Part II, Instruments and technique. 293. Recent contributions to hygrometry. 395.

Ferraz, J. de Sampaio. (For monthly meteorological summary for Brazil, see table on page iii of this index.)

Fires. Tornadoes started by an oil fire. Note. 24.

Fire weather:

Lightning storms and forest fires in the State of Washington. (4 figs.) (G. W. Alexander.) 122.

Meteorological factors in the Quartz Creek forest fire. (3 figs.) (H. T. Gisborne.) 56.

Water-level movements as an indicator of forest-fire weather.

(D. G. Thompson.) 326. Weather and forest inflammability in the southern Appala-

(2 figs.) (E. F. McCarthy.) 119. on. General Jadwin reports on, for the Mississippi chians. Flood protection. Ge. River. Repr. 532.

Floods:

Floods:
Frankenfield on the 1927 floods in the Mississippi Valley.
(6 figs.) (A. J. Henry.) 437.
Nile flood studies. Note. (F. Groissmayr.) 413.
November floods in New England and northeastern New York. (2 figs.) (H. C. Frankenfield.) 496.
Some inundations attending tropical cyclones. (1 fig.) (I. R. Tannehill.) 453.

Flora, Snowden D. Tornado of June 3, 1927, near Topeka, Kans. 270.

270 Florida:

The rainfall of. Author's abstract. (G. Richards.) ?
Carrabelle. A tornado at, August 5, 1927. Note. 36
Miami. The hurricane at. (W. J. Schubert.) 74.
Fog. Attempts to dispel. Note. (C. F. Talman.) 500.

Forecasting: Meteorological factors in the Quartz Creek forest fire. (3 figs.) (H. T. Gisborne.) 55.

Performance in long-range weather forecasting. (C. F. Brooks.) 390. Forest fires:

Lightning storms and forest fires in the State of Washington.
(4 figs.) (G. W. Alexander.) 122.
Meteorological factors in the Quartz Creek forest fire. (3

figs.) (H. T. Gisborne.) 56.

Water-level movements as an indicator of forest-fire weather.

(D. G. Thompson.) 326.

Weather and forest infarmability in the southern Appala-

Weather and forest inflammability in the southern Appalachians. (2 figs.) (E. F. McCarthy.) 119.

Forestry. Influence of precipitation cycles on. Abstr. (A. J. Henry.) 461.

Forests. The influence of, on rainfall and run-off. Repr. 533.

Formulas. Formulae for vapor pressure of ice and of water below 0° C. (F. J. W. Whipple.) 131.

Frankenfield, Harry C. (For monthly reports of floods, see table on page iii of this index.)

November floods in New England and eastern New York. (2 figs.) 496.

On the 1927 floods in the Mississippi Valley. (6 figs.) (A. J. Henry.) 437.

Henry.) 437.

Franze, Bruno. "Precipitation in South America" reviewed by W. W. Reed. 364.

French, George M. March temperature and the following season's precipitation in coastal southern California. (2 figs.) 130.

Frost damage. The protection of strawberries from frost through artificial heating. (6 figs.) (A. W. Cook.) 354.

Frost fighting. (See entry next above.)

Gas explosion. At Pittsburgh, Pa. (W. S. Brotzman.) 500.
Giles, Albert W. Tornadoes in Virginia, 1914-1925. (1 fig.) 169.
Gisborne, Harry T. Meteorological factors in the Quartz Creek forest fire. (3 figs.) 56.
Gorczyński, Ladislaus. Some results obtained by testing solarimeters with pyrheliometric tubes. (3 figs.) 488.
Greenland. Pilot-balloon ascents on the west coast—a correction.
Note. (W. H. Hobbs.) 23.
Gregg, Willis Ray. International aerological soundings at Royal Center, Ind., May, 1926: Part I, Introduction. 293.
Gret, A. Co-author. See Viant and Gret.
Groissmayr, F. Nile flood studies. Note. 413.
Grunsky, C. E.
The improbability of rainfall cycles. (2 figs.) 66.
The seasonal rainfall to any date. Note. 132.
Guam. Free-air winds over. (E. A. Beals.) 222.
Gulf Stream. C. E. P. Brooks on the effect of the fluctuations of, on the distribution of pressure. (1 fig.) 359.

Hand, Irving F. (See also "Solar radiation meaurements" in table on page 111 of this index.)
Blue-sky measurements. (1 fig.) 235.
Harrison, D. N. Co-author. See Dobson, Harrison, and Law-

rence.

Harvard College Observatory. (For "Photoheliographic measurements of sunspots" see table on page III of this index.)

Hayes, Montrose W. The St. Louis tornado of September 29, 1927. (13 figs.) 405.

Hendricks, Henry W. Analysis of the precipitation of rain and snow at Mount Vernon, Iowa. 363.

Henrickson, H. B., and Brombacher, W. G. Lag of thermometers and thermographs for aircraft. (1 fig.) 72.

Henry, Alfred J. (See also "General conditions" under "Weather in the United States" in table on page III of this index.)

Abnormal summers in the United States. (1 fig.) 349.

Berlage on east-monsoon forecasting for Java. (2 figs.) 395.

E. W. Berry's meteorological observations at Negritos, Peru. Discussion. 78. Discussion. 78.
W. Bliss on British winters in relation to world weather.

E.

E. W. Bliss on British winters in relation to world weather. Note. 79.
C. E. P. Brooks on the effect of fluctuations of the Gulf Stream on the distribution of pressure. (1 fig.) 359.
Can thunderstorms be classified? 118.
Frankenfield on the 1927 floods in the Mississippi Valley.
(2.6 mm.) 427

Frankenfield on the 1927 floods in the Mississippi Valley.
(6 figs.) 437.

Influence of precipitation cycles on forestry. Abstract. 461.
W. W. Reed on climatological data for the tropical islands of the Pacific. Note. 132.

The weather of 1927 in the United States. (2 charts.) 530.

Hessling, N. A. Variable features of barometric depressions and anticyclones as a basis for seasonal forecasting. 184.

Hickmon, Walter C. Tornadoes in Arkansas, March, 1927.

Note. 133.

Hobbs, William Herbert, Pict by March, 1927.

Hickmon, Walter C. Tornadoes in Arkansas, March, Note. 133.

Hobbs, William Herbert. Pilot-balloon ascents on the west coast of Greenland—a correction. Note. 23.

Honduras. July, 1927, weather in. Extracts, 328.

Honolulu. Free-air winds over. (E. A. Beals.) 222.

Humboldt Current. (R. C. Murphy.) 78.

Humphreys, William J.

The greater increase in size and intensity of the extratropical cyclones by night than by day. 496.

The growth of the northeastward-moving cyclone in eastern North America. 495.

Hurd, Willis E. (See also "North Pacific Ocean" under "Weather on the Atlantic and Pacific Oceans" in table on page 111 of this index.)

on the Abahas and index.)

A Madagascar cyclone. Note. 149.

The Virginia-District of Columbia-Maryland tornado of November 17, 1927. 499.

Waterspout in the Potomac River, Washington, November 17, 1927. 499.

Hurricanes

The hurricane tide at Miami. (W. J. Schubert.) 74.
Some inundations attending tropical cyclones.
(I. R. Tannehill.) 453. fig.) Hygrometry. Recent contributions to. (S. P. Fergusson.)

Ice:
The distribution of Arctic ice, Repr. 187.
Formulae for the vapor pressure of ice and water below 0° C.
(F. J. W. Whipple.) 131.
Ice forecasting. By means of the weather. (2 figs.) (U. S. Coast Guard Bulletin.) Repr. 409.
Illinois. Tornado of April 19, 1927. (C. J. Root.) 175.
India. Seems assured of another satisfactory monsoon. Repr. 413.

Indiana. International aerological soundings at Royal Center. (W. R. Gregg, S. P. Fergusson, and L. T. Samuels.) (5 figs.) 293.

International Balloon Race, September 10, 1927. Meteorological aspects of. (3 figs.) (C. G. Andrus.) 493.

International Geodetic and Geophysical Union. 1927 meetings at Prague. (H. H. Kimball.) 387.

Inundations. See Floods. Iowa

Weather and corn maturity in. (5 figs.) (C. D. Reed.)

Mount Vernon. Analysis of the precipitation of rain and snow at. (H. W. Hendricks.) 363.

Irrigation, New irrigation projects in Arizona and New Mexico.

Excerpts. 327.

Jadwin, Edgar, Gen. Reports on flood protection system for the Mississippi River. Repr. 532.

Jamaica. July, 1927, weather in. Extracts. 328.

January thaw. (R. Nunn.) 20.

Japan. Aerological work in. Note. (L. T. Samuels.) 79.

Jarboe, James H. The Rocksprings (Tex.) tornado, April 12, 1927. 182.

Jaumotte, Quoted on Aerological soundings by airplane in relation to the Bjerknes theory of cyclones. Note. (B. M. Varney.) 132.

Java. Berlage on east-monsoon forecasting for. (2 figs.) (A. J. Henry.) 395.

July (1927) weather in other countries. Extracts. 328.

Kansas

Auburn. Tornado, June 3, 1927. (E. C. Corkill.) 270.
 Topeka. Tornado, June 3, 1927. (S. D. Flora.) 270.
 Kimball, Herbert H. (See also "Solar radiation measurements" in table on page iii of this index.)

in table on page iii of this index.)

Measurements of solar radiation intensity and determinations of its depletion by the atmosphere, with bibliography of pyrheliometric observations. (3 figs.) 155.

The Prague meetings of the International Geodetic and Geophysical Union and its meteorological section. 387.

Kincer, Joseph B. (See also "Effect of weather on crops and farming operations" in table on page iii of this index.) Another mild winter, 1926-27. (2 charts.) 81.

Kobayasi, T. On the mechanisms of cyclones and anticyclones. Abstract. 327.

Kobayasi T. On the mechanisms of cyclones and anticyclone Abstract. 327.

Krichewsky, S. Interpretation of correlation coefficients. 107.

Laskowski, Bernard R. Tornadoes in Arkansas, July 16, 1927.

Lawrence, J. Co-author. See Dobson, Harrison, and Lawrence. Lightning: (N. E. Dorsey.) 268.

Lightning storms and forest fires in the State of Washington.

(4 figs.) (G. W. Alexander.) 122.

The thunderstorm at Cincinnati and its relation to electrical power service. (8 figs.) (W. C. Devereaux.) 112.

Unique destruction of a tulip tree by. (F. P. Norbury.) (1 268

fig.) 268.

Linney, Charles E. Ten years of evaporation in the Southwest.

Long-range forecasting:

Berlage on east-monsoon forecasting for Java. (2 figs.) (A. J. Henry.) 395.

March temperature and the following season's precipitation in coastal southern California. (2 figs.) (G. M. French.) 130.

Performance in. (C. F. Brooks.)

Twelve years of, of precipitation and water levels. (A. Wallén.) (Translated by B. M. Varney.) 233.

Variable features of barometric depressions and anticyclones as a basis for seasonal forecasting. (N. A. Hessling.) 184.

McCarthy, E. F. Weather and forest inflammability in the southern Appalachians. (2 figs.) 119.

Madagascar. A Madagascar cyclone. (Note.) (W. E. Hurd.)

Influence of precipitation cycles on forestry. Henry.) 461. Marshall, -Abstract. (A. J. Henry.)

Marvin, Charles F.

Interpretation of correlation coefficients. 107.
Introductory note to papers on the reality of meteorological periodicities. 66.
Measurements of solar radiation and their interpretation.

Cape Cod on the weather. (4 ligs.)

Mattice, William A. The relation of spring temperatures to apple yields. (2 figs.) 456.

Mediterranean Sea. Meteorological conditions over the eastern end. (1 fig.) (H. Meredith.) 407.

Menzel, Donald H. How sunspots act as refrigerators. Repr. 533.

Meredith, H. Meteorological conditions over the sea in the content Mediterranean. (1 fig.) 409.

eastern medical Meteorology:

Agricultural meteorology—

The relation of spring temperatures to apple yields.

(2 figs.) (W. A. Mattice.) 456.

Weather and corn maturity in Iowa. (5 figs.) (C. D. Reed.) 485.

ard.) 18.

Historical meteorology—

The theory of atmospheric turbulence—an historical résumé and an outlook. (C. G. Rossby.) 6.

An example of widespread bumpiness in the air. (C. G. 494.

Andrus.) 494.

Meteorological aspects of the International Balloon Race from Detroit, Mich., September 10, 1927. (3 figs.) (C. G. Andrus.) 493.

International meteorology—
International aerological soundings at Royal Center, Ind., May, 1926. (5 figs.) (W. R. Gregg, S. P. Fergusson, and L. T. Samuels.) 293.

Progress in international meteorology. Note. 21.
The Prague meetings of the International Geodetic and Geophysical Union and its Meteorological Section, 1927. (H. H. Kimball.) 387.

Mathematics in meteorology—
Interpretation of correlation coefficients. (C. F. Marvin.) 108.

F. M. Exner on dynamical meteorology. (E. W. Woolard.) 18.

A group or correlation periodogram, with application to the rainfall of the British Isles. (2 figs.) (D. Alter.) 263.

Interpretation of correlation coefficients. (C. F. Marvin.) 107.

Investigation of rainfall periodicities between 1½ and 2½ years by use of Schuster's periodogram. (6 figs.) (D. Alter.) 60.

(D. Alter.) 60.

Note regarding previous use of correlation periodogram by Clayton. (D. Alter.) 413.

On the interpretation of correlation coefficients in the analysis of casual relations in physical phenomena. (E. W. Woolard.) 109.

A study of the possibility of economic value in statistical investigations of rainfall periodicities. (D. Alter.)

Mexico. July, 1927, weather in. Extracts. 328.
Michigan. Hourly rainfall probabilities at S. Ste. Marie. (5 figs.) (C. L. Ray.) 323.
Miller, Eric R. Monthly charts of frequency-resultant winds in the United States. (13 figs.) 308.
Mississippi River. General Jadwin reports on flood protection system. Repr. 532.
Mississippi Valley. Frankenfield on the 1927 floods in. (6 figs.) (A. J. Henry.) 437.
Missouri A thunderstorm with rain hall sleet, and snow at the state of th

(A. J. Henry.) 437.

Missouri. A thunderstorm with rain, hail, sleet, and snow at St. Joseph. Note. (W. S. Belden.) 133.

Mitchell, Charles L. (See "Storms and warnings" in table on page iii of this index.)

Monsoons:

Berlage on east-monsoon forecasting for Java. (2 figs.) (A. J. Henry.) 395.
India seems assured of another satisfactory monsoon. Repr.

413.

Mount Weather Observatory bulletins. Distribution of surplus

stock. 21.

Mount Wilson Observatory. (For "Photoheliographic observations" see the table on page III of this index.)

Murphy, Robert Cushman. Investigations of the American Museum of Natural History in the Humboldt Current region. 78.

Navarrete, Julio B. (See also "Meteorological summary for southern South America" in table on page III of this index.) Solar radiation and rainfall in the southern region of Chile. (1 fig.) (Translation by W. W. Reed.) 272.

(1 fig.) (Translation by W. W. Reed.)

Necrology:
Brückner, Edouard. 271.
Dines, William Henry. 532.

New England. November floods in, and eastern New York. (2 figs.) (H. C. Frankenfield.) 496.

New Mexico. New irrigation projects in. Excerpts. 327.

New York. November floods in New England and eastern New York. (2 figs.) (H. C. Frankenfield.) 496.

Nichols, Esek S.
Frequencies of weather types at San Jose, Calif. (2 figs.)

Frequencies of weather types at San Jose, Calif. (2 figs.) 403.

Translation and summary of E. S. Federov's "Das Klima als Wettergesamtheit." 401.

Nile floods. Nile flood studies. Note. (F. Groissmayr.) 413.

Norbury, F. P. Unique destruction of a tulip tree by lightning. (1 fig.) 268.

Normals. The seasonal rainfall to any date. Note. (C. E.

Grunsky.) 132. North America

The climatic regions of. (2 figs.) (W. Van Royen.) 315 and 410.

Weather in the Americas as affecting trade. Repr.
North Atlantic Ocean. See table on page III of this index.
North Pacific Ocean. See table on page III of this index.
Nunn, Roscoe. The "January thaw." (1 fig.) 20.

Ocean temperatures. The dependence of coastal sea temperatures of Cape Cod on the weather. (4 figs.) (F. V. Tripp.) 312.

Ohio. The thunderstorm at Cincinnati and its relation to electrical power service. (8 figs.) (W. C. Devereaux.) 112.
Oil fires. Tornadoes started by. Note. (D. Brunt.) 24.
Ozone. Measurements of the amount of ozone in the earth's atmosphere and its relations to other geophysical conditions: Part 2. (G. M. B. Dobson, D. N. Harrison, and Lawrence.)
Repr. 364.

Pacific Ocean (see also North Pacific Ocean):

The northeast trade winds of. (12 figs.) (E. A. Beals.) 211.
W. W. Reed on climatological data for. Note. (A. J.

V. W. Reed on climatological data for. Note. (A. J. Henry.) 132.

Panama, Isthmus of, Winds and storms on. (10 figs.) (L. T. Chapel.) 519.
Pennsylvania. Damaging gas explosion at Pittsburgh. (W. S. Brotzman.) 500.

Periodicities:

The improbability of rainfall cycles. (2 figs.) (C. E. Grun-

sky.) 66.
Introductory note to papers on the reality of meteorological periodicities. (C. F. Marvin.) 66.
Investigation of rainfall periodicities between 1½ and 2½ years by use of Schuster's periodogram. (6 figs.) (D. Alter.) 60.
A study of the possibility of economic value in statistical investigations of rainfall periodicities. (D. Alter.) 110.
Sunspots and rainfall. (3 figs.) (A. Streiff.) 69.

Periograms:

A group or correlation periodogram with application to the rainfall of the British Isles. (2 figs.) (D. Alter.) 263.

Investigation of rainfall periodicities between 1½ and 2½ years by use of Schuster's periodogram. (6 figs.) (D. Alter.) 60.

Note regarding previous use of correlation periodogram by

Alter.) 60.

Note regarding previous use of correlation periodogram by Clayton. (D. Alter.) 413.

Peru. Meteorological observations at Negritos. (1 fig.) 75.

Photoheliographic measurements of sunspots. (See table on page

Photoheliographic measurements of sunspots. (See table on page III of this index.)

Photomicrographs. Some recent treasures of the snow. (18 figs.) (W. A. Bentley.) 358.

Pilot-balloons. Ascents on the west coast of Greenland—a correction. Note. (W. H. Hobbs.) 23.

Portugal. See Coimbra.

Prague meetings of the International Geodetic and Geophysical Union. (H. H. Kimball.) 387.

Precipitation:

Chemical composition of—

Analysis of the precipitation of rain and snow at Mount Vernon, Iowa. (H. W. Hendricks.) 363.

Geographical distribution—

"Precipitation in South America." (Reviewed by W. W. Reed.) 364.

Reed.) 364.

In general-Causes of tropical rainfall. Repr. 271.

Variations in-

A group or correlation periodogram with application to the rainfall of the British Isles. (2 figs.) (D. Alter.) 263

263.
Hourly rainfall probabilities at S. Ste. Marie, Mich. (5 figs.) (C. L. Ray.) 323.
The improbability of rainfall cycles. (2 figs.) (C. E. Grunsky.) 66.
The influence of forests on rainfall and run-off. Repr.

The influence of precipitation cycles on forestry. Abstr. (A. J. Henry.) 461.

Introductory note to papers on the reality of meteorological periodicities. (C. F. Marvin.) 66.

Investigation of rainfall periodicities between 1 and 2½ years by use of Schuster's periodogram. (6 figs.) (D. Alter.) 60.

March temperature and the following season's precipitation in coastal southern California. (2 figs.) (G. M. French.) 130.

Rain-bearing winds in the far Western States. (3 figs.) (T. R. Reed.) 228.

The rainfall of Florida. Author's abstract. (G. Richards.) 80.

80

The Royal Meteorological Society's "Rainfall Atlas of the British Isles." Note. (B. M. Varney.) 80. The seasonal rainfall to any date. Note. (C. E. Grun-

sky.) 132. Solar radiation and rainfall in the southern region of Chile. (Translation by W. W. Reed.) 272. (J. B. Navarrete.)

A study of the possibilit of economic value in statistical investigations of rainfall periodicities. (D. Alter.) 110.

Sunspots and rainfall. (3 figs.) (A. Streiff.) 69.
Twelve years of long-range forecasting of precipitation and water levels. (A. Wallen.) (Translation by B. M. Varney.) 233.
The weather of 1927 in the United States. (2 charts.)

(A. J. Henry.) 530.

Pressure:

C. E. P. Brooks on the effect of fluctuations of the Gulf Stream on the distribution of pressure. (1 fig.) (A. J. Henry.) 359. The greater increase in size and intensity of the extra-tropical cyclones by night than by day. (W. J. Hum-phreys.) 496.

Pressure—Continued.

Sure—Continued.

Variations—Continued.

The growth of the northeastward-moving cyclone in eastern North America. (W. J. Humphreys.) 495.

Interrelations of pressure anomalies over the earth. (F. M. Exner.) 238.

Recorder of frequency of atmospherics: Its use in meteorology. (R. Bureau, A. Viant, and A. Gret.) Abstract. 327.

An unusual well. Note. (A. G. Simson.) 24.

Pyrheliometers:
Improved water-flow pyrheliometer. (12 figs.) (W. M. Shulgin.) 361.

Measurements of solar radiation and their interpretation. (3 figs.) (C. F. Marvin.) 49.

Measurements of solar radiation intensity and determination

of its depletion by the atmosphere, with bibliography of pyrheliometric observations. (3 figs.) (H. H. Kimball.) 155.

Quartz Creek Forest Reserve. Meteorological factors in the forest fire in. (3 figs.) (H. T. Gisborne.) 56.

Radio. Preliminary observations on solar activity and radio reception. (2 figs.) (L. W. Austin.) 237.
Rainfall Atlas of the British Isles. Note. (B. M. Varney.) 80.
Ray, Clifton L. Hourly rainfall probabilities at S. Ste. Marie, Mich. (5 figs.) 323.
Reality of meteorological periodicities. (Papers on, see the following entries: Marvin, C. F., Grunsky, C. E., Streiff, A.)
Reed, Charles D. Weather and corn maturity in Iowa. (5 figs.) 485.

Reed, Thomas R. Rain-bearing winds in the far western States.

(3 figs.) 228.

Reed, Wesley W. Review of Bruno Franze's "Precipitation in South America." 364. Reeder, George. Quoted on Tornadoes in Missouri Valley, May, 1927. 226.

Refrigerators. H Menzel.) 533. How sunspots act as refrigerators. Repr. (D. H.

Reichelderfer, Frederic W. Improved tables for determining true wind at sea. Abstract. 23.

Richards, Gragg. The rainfall of Florida. Author's abstract. 80. Rocksprings (Tex.) tornado. (See under Texas.)

Root, Clarence J. The Illinois tornado of April 19, 1927. 175.

Rossby, Carl-Gustaf.

Convection in the free atmosphere and over a heated surface.

(1 fig.) 1.

The mass exchange in the free air and related phenomena.

Note. 186. The theory of atmospheric turbulence—an historical résumé

and an outlook. 6.

Royal Meteorological Society's "Rainfall Atlas of the British Isles." Note. (B. M. Varney.) 80.

Run-off. The influence of forests on rainfall and run-off. Repr.

St. Helena. The variation of meteorological elements at. Author's abstract. (C. E. P. Brooks.) 187.
 Samoa: Solar radiation observations at Apia. (2 figs.) (A. Thom-

Samoa: Solar radiation observations at Apia. (2 ngs.) (A. Thomson.) 266.
Weather during 1926 at Apia. Abstract. (A. J. Henry.) 22.
Samuels, Leroy T. (See also "Aerological observations" in table on page iii of this index.)
Aerological work in Japan. Note. 79.
International aerological soundings at Royal Center, Ind., May, 1926: Part III, The results of the ascensions. (5 figs.) 297

Washington, D. C., tornado of May 14, 1927. 227.

Schubert, Wenzel Joseph. The hurricane tide at Miami. 74.

Schuster's periodogram. Use of, in determining rainfall periodicities between 1½ and 2½ years. (6 figs.) (D. Alter.) 60.

September weather in the British Isles. Repr. 413.

Shaw, Sir Napier. On the unit of radiation. 491.

Shilling, Alphonso W. Quoted on tornadoes in Nebraska, May, 1927. 226.

Shipman, Truman G. Observing a tornado's life. 183.

Shulgin, W. M. Improved water-flow pyrheliometer. (12 figs.)

Simpson, A. G. An unusual well. Note. 24. Snow and cold wave in Europe, December 18-23, 1927. Note. 533. Snow crystals. Some recent treasures of the snow. (18 figs.)

(W. A. Bentley.) 358.
Solar-constant values. New definitive scale. (C. G. Abbot.) 236.
Solarimeters. Some results obtained by testing solarimeters with pyrheliometric tubes. (3 figs.) (L. Gorczyński.) 488.
Solar radiation:

And rainfall in the southern region of Chile. (1 fig.) (J. B. Navarrete. (Trans. by W. W. Reed.) 272.

Some results obtained by testing solarimeters with pyrheliometric tubes. (3 figs.) (L. Gorczyński.) 488.

Solar radiation measurements: (See also table on page iii of this index. Improved water-flow pyrheliometer. (12 figs.) (W. M. Shulein) 261 361.

Measurements of, and their interpretation. (3 figs.) (C. F.

Marvin.) 49.

Measurements of solar radiation intensity and determinations of its depletion by the atmosphere, with bibliography of pyrheliometric observations. (3 figs.) (H. H. Kimball.) 155.

Observations at Apia, Samoa. (2 figs.) (A. Thomson.) 266.
On the unit of radiation used in meteorological treatises on actinometry. (A. Angstrom.) 364.
Sir Napier Shaw on the unit of radiation. 491.

Solar relations: How sunspots act as refrigerators. Repr. (D. H. Menzel.)

Preliminary observations on solar activity and radio reception.

Preliminary observations on solar activity and radio reception.

(2 figs.) (L. W. Austin.) 237.

Sunspots and rainfall. (3 figs.) (A. Streiff.) 71.

South America: (See also "Meteorological Summary" in table on page iii of this index.)

"Precipitation in South America" by Bruno Franze. (Reviewed by W. W. Reed.) 364.

Variable features of barometric depressions and anticyclones

Variable features of barometric depressions and anticyclones as a basis for seasonal forecasting. (N. A. Hessling.) 184. Weather in the Americas as affecting trade. Repr. 239.

Souza, Francisco. (See "Meteorological Summary for Brazil" in table on page iii of this index.)

Spencer, Robin E. (See "Rivers and floods" in table on page iii of this index.)

Stevens, Welby R. (See "Aerological observations" in table on page iii of this index.)

Storm damage. (Arranged alphabetically by States and countries; chronologically under individual States.)

chronologically under individual States.) Arkansas

Tornadoes in, 1879–1926. (1 fig.) (H. S. Cole.) 176. Notable tornadoes of May, 1927. (H. S. Cole.) 226. Tornadoes in Arkansas, March, 1927. (W. C. Hickmon.) 133.

Tornadoes in Arkansas, July 16, 1927. (P. Connor and B. R. Laskowski.) 327.

Florida. Tornado at Carrabelle, August 15, 1927. Note. 364. Illinois. Tornado of April 19, 1927. (C. J. Root.) 175. Kansas

Tornado at Auburn, June 3, 1927. (E. C. Corkill.) 270.
Tornado, June 3, 1927, near Topeka. (S. D. Fiora.) 270.
Mississippi Valley. Frankenfield on the 1927 floods in. (6 figs.) (A. J. Henry.) 437.

Tornado of May 24, 1927, at St. Joseph. (W. S. Bel-

den.) 228.
The St. Louis tornado of September 29, 1927. (13 figs.)

(M. W. Hayes.) 405.

New England and New York. November floods in. (2 figs.)

(H. C. Frankenfield.) 496.

Texas. Some inundations attending tropical cyclones. (1 fig.) (I. R. Tannehill.) 453.

Virginia. Tornadoes in 1814–1925. (1 fig.) (A. W. Giles.) 169.

Snow and cold wave in, December 18-23, 1927. Note. 533.

Panama, Isthmus of. Wind and storms on. (10 figs.)
(L. T. Chapel.) 519.

Strawberries. The protection of, against frost through artificial heating. (6 figs.) (A. W. Cook.) 354.

Streiff, Abraham. Sunspots and rainfall. (3 figs.) 69.

Summers, Abnormal summers in the United States. (1 fig.) (A. J. Henry.) 349.

Shipman, Traman C. Observing a barasdo'r life. 1888.

Sunspots:
How sunspots act as refrigerators. Repr. (D. H. Menzel.)

Provisional sunspot relative numbers for the second half of

1926. Repr. 30.

Provisional sunspot relative numbers for 1927, January—September, 1927. (A. Wolfer.) 419.

Sunspots and rainfall. (3 figs.) (A. Streiff.) 69.

Talman, Charles Fitzhugh. (See also "Bibliography" in table on page iii of this index.)
Attempts to dispel fog. Note. 500.

Tannehill, tvan R. Some inundations attending tropical cyclones. 453

(1 fig.) Temperature: Abnormal summers in the United States. (1 fig.) (A. J.

Abnormal summers in the United States. (1 fig.) (A. J. Henry.) 349.

The "January thaw." (1 fig.) (R. Nunn.) 20.

Lag of thermometers and thermographs for aircraft. (1 fig.) (H. B. Henrickson and W. G. Brombacher.) 72.

The relation of spring temperatures to apple yields. (2 figs.) (W. A. Mattice.) 456.

The weather of 1927 in the United States. (2 charts.) (A. J. Henry.) 530

Henry.)

Some inundations attending tropical cyclones. (1 fig.)
(I. R. Tannehill.) 456.
Tornado of April 12, 1927 at Rocksprings. (J. H. Jarboe.)

ohs. Lag of thermometers and thermographs for (1 fig.) (H. B. Henrickson and W. G. Brombacher.) Thermographs.

aircraft.

Thermometers. (See also entry immediately above.)

A new thermometer scale. Note. (B. M. Varney.) 24.

Thompson, D. G. Water-level movements as an indicator of forest-fire weather. 326.

Thomson, Andrew. Solar radiation observations at Apia, Samoa. (2 figs.) 266.

Thundarstorms:

Thunderstorms:

Can thunderstorms be classified? (A. J. Henry.) 118.
Lightning storms and forest fires in the State of Washington.
(4 figs.) (G. W. Alexander.) 122.
The thunderstorm at Cincinnati and its relation to electrical power service. (8 figs.) (W. C. Devereaux.) 112.
The hurricane tide at Miami. (W. J. Schubert.) 74.

Tornadoes: Observing a tornado's life. (T. G. Shipman.) 183.

Observing a tornado's life. (T. G. Shipman.) 183. Chronological arrangement—

1814—1925 in Virginia. (A. W. Giles.) 169. L
1879—1926 in Arkansas. (H. S. Cole.) 176.
1927, March, in Arkansas. (W. C. Hickmon.) 133.
1927, April 12, Rocksprings, Tex. (J. F. Jarboe.) 182.
1927, April 19, in Illinois. (C. J. Root.) 175.
1927, May, in Arkansas. (H. S. Cole.) 226.
1927, May in Missouri. (G. Reeder.) 226.
1927, May 24, at St. Joseph, Mo. (W. S. Belden.) 228.
1927, May 14, at Washington, D. C. (L. T. Samuels.)
227.

1927, June 3, at Auburn, Kans. (E. C. Corkill.) 270. 1927, June 3, near Topeka, Kans. (S. D. Flora.) 270. 1927, July 16, in Arkansas. (P. Connor and B. R. Las-

kowski.) 327. 1927, August 15, at Carrabelle, Fla. Note. 364. 1927, September 29, at St. Louis, Mo. (M. W. Hays.)

405. 1927, November 17, District of Columbia, Maryland, and Virginia. (W. E. Hurd.) 499.

Arkansas, 1927, May. (H. S. Cole.) 176.

Arkansas, 1927, March. (W. C. Hickmon.) 133.

Arkansas, 1927, May. (H. S. Cole.) 226.

Arkansas, 1927, July 16. (P. Connor & B. R. Laskowski.) 227. District of Columbia, November 17, 1927. (W. E. Hurd.)

Florida, Carrabelle, 1927, August 15. Note. 364. Illinois, 1927, April 19. (C. J. Root.) 175. Kansas, Auburn, 1927, June 3. (E. C. Corkill.) 270.

-Continued.

Maryland, 1927, May. (G. Reeder.) 226.

Missouri, St. Joseph, 1927, May 24. (W. S. Belden.)

Missouri, St. Hayes.) 40 Louis, 1927, September 29. (M. W.

Nebraska, 1927, May. (A. W. Shilling). 226.
Texas, Rocksprings, 1927, April 12. (J. H. Jarboe.) 182.
Virginia, 1914–1918. (A. W. Giles.) 169.
Virginia, 1927, November 17. (W. E. Hurd.) 499.
Washington, D. C. (see also District of Columbia), 1927,
May 14.

May 14.

Washington, D. C., 1927, November 17. (L. T. Samuels.)
227. (W. E. Hurd.) 499.

Trade. As affected by weather in various parts of the world.

Repr. 414.

Trade winds of the Pacific Ocean. (12 figs.) (E. A. Beals.)
211 211.

Tripp, Frances Vandervoort. The dependence of coastal sea temperatures of Cape Cod on the weather. 312.

Tropics. Causes of tropical rainfall. Repr. 271.

Tulip tree. Unique destruction of, by lightning. (1 fig.) (F. P. Norbury.) 268.

Typhoons. (See "Typhoons and depressions" in table on page iii of this index.)

d.

Uccle. (See Brussels.)
United States: (See also "Weather in the United States" in table on page iii of this index.)
Abnormal summers in. (1 fig.) (A. J. Henry.) 349.
Another mild winter. (2 charts.) (J. B. Kincer.) 81.
Monthly charts of frequency-resultant winds in. (13 figs.) (E. R. Miller.) 308.
Ten years of evaporation in southwestern United States. (C. E. Linney.) 320.
The weather of 1927 in the United States. (2 charts.) (A. J. Henry.) 530.

The weather of 1927 in the United States. (2 charts.) (A. v. Henry.) 530.

United States Coast Guard Bulletin. Ice forecasting by means of the weather. (2 figs.) Repr. 409.

United States Lake Survey. (See "Great Lakes' levels" in table on page iii of this index.)

United States Naval Observatory. (See "Photoheliographic observations" in table on page iii of this index.)

Unit of radiation. Sir Napier Shaw on. 491.

Vanderlingen, E. The weather at Brussels (Uccle) during April and May, 1927, 271.

Van Royen, W. The climatic regions of North America. (2 figs.) 315, 410.

Vapor pressure. Formulae for the vapour pressure of ice and of water below 0° C. (F. J. W. Whipple.) 131. Varney, Burton M.:

Jaumotte on aerological soundings by airplane in relation to the Bjerknes theory of cyclones. Notes. 132.
Resignation of, from Weather Bureau. 132.
The Royal Meteorological Society's "Rainfall Atlas of the British Isles." Note. 80.

The second edition of Defant's "Wetter und Wettervorher-sage." Note. 187. Viant, A. Co-author. See Bureau, Viant and Gret.

Walker, Gilbert T. On the measure of correlation. 459.
Wallén, Axel. Twelve years of long-range forecasting of precipitation and water levels. (Translated by B. M. Varney.) 233.
Washington, D. C. (Sce also District of Columbia.)
Tornado of May 14, 1927. (L. T. Samuels.) 227.
Washington (State):

Washington (State):
Lightning storms and forest fires in the State. (4 figs.)
(G. W. Alexander.) 122.
Yakima Valley. Critical spring temperatures for apples in.
(8 figs.) (E. S. Ellison and W. L. Close.) 11.

Twelve years of long-range forecasting of precipitation and water levels. (A. Wallen.) (Translated by B. M. Varney.) 233.

Water-level movements as in indicator of forest-fire weather.
(D. G. Thompson.). 326.
Waterspouts. In the Potomac River, Washington, November 17, 1927, (W. E. Hurd.) 499.
Watt, R. A. W. The range of atmospherics. Repr. 237.
Weather:

Weather:

In the Americas as affecting trade. Repr. 239, 461.
In various parts of the world as affecting trade. Repr. 414.
Weather Bureau Staff meetings, 1926–27. (E. W. Woolard.) 238.
Weather types. Frequencies of, at San Jose, Calif. (2 figs.)
(E. S. Nichols.) 403.

Weightman, Richard Hanson. (See table on page iii of this index.)
Wetter und Wettervorhersage. Second edition. (Reviewed by
B. M. Varney.) 187.
Whipple, F. J. W. Formulae for the vapour pressure of ice and of
water below 0° C. 131.
Winde:

Winds:

ds:

Effects of—
Rain-bearing winds in the far Western States. (3 figs.)
(T. R. Reed.) 228.

General circulation of the atmosphere—
Causes of tropical rainfall. Repr. 271.
The mass exchange in the free atmosphere, and related phenomena. Note. (C.-G. Rossby.) 186.

Free-air winds over Honolulu and Guam. (E. A. Beals.) 222.

Monthly charts of frequency-resultant winds in the

Monthly charts of frequency-resultant winds in the United States. (13 figs.) (F. V. Tripp.) 308.

The northeast trade winds of the Pacific. (12 figs.) (E. A. Beals.) 211.

Winds and storms on the Isthmus of Panama. (10 figs.)
(L. T. Chapel.) 519.

Methods of observation—

Improved tables for determining true wind at sea. Abstract. (F. W. Reichelderfer.) 33.

New three-cup anemometer. Repr. 533.

Surface influence of winds—

The theory of atmospheric turbulence—a résumé and an outlook. (C.-G. Rossby.)

Vertical currents. Convection—
Convection in the free atmosphere and over a heated surface. (1 fig.) (C.-G. Rossby.) 1.

Winters:

Another mild winter, 1926-27. (2 charts.) (J. B. Kincer.)

E. W. Bliss on British winters in relation to world weather.

Note. (A. J. Henry.) 79.

Wolfer sunspot relative numbers. (See Wolfer, A.) (Also table on page iii of this index.)

Wolfer, A.

Provisional sunspot relative numbers for the second half of 1926. Repr. 30. 1926. Repr. 30.

Provisional sunspot relative numbers for January-September, 1927. 419.

Woolard, Edgar W.

F. M. Exner on dynamical meteorology. 26.
On the interpretation of correlation coefficients in the analysis of casual relations in physical phenomena. 109.
Note on the theorems of Dines and Walker. 460.
Weather Burney Staff meetings 1098-27. 228

Weather Bureau Staff meetings, 1926–27. 238.
World. September weather in various parts as affecting trade.

Repr. 414.
World weather:

Current weather records. Note. (A. J. Henry.) 328. E. W. Bliss on British winters in relation to world weather. Note. (A. J. Henry.) 79.

Yerkes Observatory. (See "Photoheliographic observations" in table on page iii of this index.)

Zero temperatures. Snow cover, cold waves, and zero temperatures. Note. (R. M. Dole.) 82.